

JOB DESCRIPTION
MURFREESBORO WATER AND SEWER DEPARTMENT
ENGINEER IN TRAINING

1. JOB TITLE: ENGINEER IN TRAINING

- 2. DEFINITION:** This position requires exercising independent personal judgment and application of engineering principles and practices for the operation and expansion of the Murfreesboro water, repurified water and sewerage systems. This position reports directly to the Assistant Director, Engineering. All employees are responsible to the Director of the Water and Sewer Department and the City Manager. This is a professional level position with work typically performed in an office environment, with occasional field work required. This position is classified as Exempt for purposes of the Fair Labor Standards Act, as having no significant occupational exposure to bloodborne pathogens, and as Non-Safety Sensitive; the employee is subject to reasonable suspicion, post accident, return to duty and follow-up drug and alcohol testing.

3. EQUIPMENT/JOB LOCATION:

- a. This position requires the use of a personal computer, photocopying machine, telephone, other modern office equipment and an automobile.
- b. The job location is at the Water and Sewer Department Engineering Section. All city buildings and vehicles are smoke free. Field inspection of improved and unimproved construction sites is also required.

4. ESSENTIAL FUNCTIONS OF THE JOB:

- a. Applies engineering principles and practices for the planning, design and operation of the municipal water, repurified water and sewerage systems.
- b. Assists with water and repurified water distribution and sewer collection system master planning.
- c. Assists in developing and maintenance of water, repurified water and sewer line engineering and design standards.
- d. Review plats and plans and prepares written comments from Department Staff to the Murfreesboro Planning Director for consideration by the City Planning Commission.
- e. Reviews and approves water, repurified water and sewer line plans and plats submitted by other engineers.
- f. Determines the availability of water, repurified water and sewer to specific subdivisions and/or lots.
- g. Makes recommendations for water and repurified water distribution and sewer collection system capital improvements for inclusion in the fiscal budget.
- h. Coordinates surveys to establish control for line and grade for the construction of water and repurified water lines and sanitary sewers.
- i. Coordinates and reviews property surveys for the purpose of preparing water, repurified water and sewer line easements.
- j. Reviews and recommends changes to the Murfreesboro City Code as related to water, repurified water and sewer issues.

- k. Coordinates field surveys and prepares special project reports.
- l. Assists in development of standard water, repurified water and sewer line specifications and revisions thereto.
- m. Reviews and approves hydraulic calculations for extension of water, repurified water and sewer lines and sewer line cut sheets.
- n. Reviews contract change orders and pay requests for water, repurified water and sewer line projects.
- o. Assists in the development of a hydraulic computer model of the water and repurified water distribution systems and sewer collection system using commercially available software. Coordinates with employees and consultants in the collection of field data for calibration and verification of the model. Familiarity with MWH Soft preferred.
- p. Assists in the preparation and maintenance of standards for water, repurified water and sewer lines in subdivision.
- q. Prepares easement descriptions and negotiates easements with owners.
- r. Operates an automobile for the purpose of making field inspections of construction sites and Department facilities.

5. ADDITIONAL EXAMPLES OF WORK PERFORMED:

- a. Perform other duties and special projects as assigned.

6. REQUIRED KNOWLEDGE, SKILLS AND ABILITIES:

- a. Must be at least 21 years of age.
- b. Must have college degree in Civil or Environmental Engineering from an accredited school of engineering.
- c. Must have successfully passed Engineer in Training examination.
- d. Must be familiar with standard engineering principles and practices of the State of Tennessee design standards for water and sewer lines.
- e. Must have legal authorization to work in the United States.
- f. Ability to communicate effectively in English, orally and in writing.
- g. Possess a driver's license valid in the state of Tennessee with the ability to safely operate an automobile.
- h. Must maintain automobile liability insurance on vehicle used to perform job duties for City of at least \$100,000.00 single limits or such other amount as City wide policies may require in the future.
- i. Must have a working knowledge of land survey.
- j. Must have a familiarity with geographic information systems. Familiarity with Arc View and AutoCAD preferred.
- k. Knowledge and ability to operate a personal computer with Microsoft word processing, database and spreadsheet programs.
- l. Must be capable of independent judgment.
- m. Ability to make frequent and extended trips to construction sites, improved and unimproved, in all weather conditions.
- n. Must demonstrate good temperament, judgment and human relation skills and be able to communicate with developers, contractors, engineers, surveyors and others of the public, some of whom at times may be irate and unreasonable.

- o. Must have the ability to perform occasional overtime and weekend work.
- p. Ability to establish and maintain an effective working relationship with the public and other employees.
- q. Ability to report to work on time and perform duties of the job for an entire workday and an entire work week with occasional work over 40 hours per week and attend evening meetings.

Exempt
Non-Safety Sensitive
September 25, 2006